# Fluid Sensor for Hemodialysis Equipment





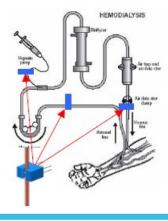
## **Application**

Hemodialysis is the most common method used to treat advanced and permanent kidney failure. In hemodialysis, the patient's blood is allowed to flow through a machine with a special filter that removes wastes and extra fluids. The clean blood is then returned to the patient's bloodstream.



## Requirement

The hemodialysis instrument has three main jobs: pump blood and monitor blood flow for safety, clean wastes from blood and monitor blood pressure and rate of fluid removal from the patient's body. An air and/or bubble sensor checks the blood in the tubing to ensure that air does not get into the bloodstream. The same type of sensor can be use to detect the presence or absence of other fluids in the machine, like purified water and dialysate fluid.



#### Solution

#### **OPB350 Series, Tube Liquid Sensor**

- Non-contact fluid sensing
- Opaque injection-molded plastic housing shields the active optoelectronic components from ambient lighting
- Designed to work with 1/8", 3/16" and 1/4" outside diameter clear tubes
- Analog output identifies states such as "fluid present", "fluid type", "no fluid present" and "no tube present"
- Custom designs also available

